

Title (en)  
HAND TOOL MACHINE

Title (de)  
HANDWERKZEUGMASCHINE

Title (fr)  
MACHINE OUTIL À MAIN

Publication  
**EP 2776212 A1 20140917 (DE)**

Application  
**EP 12775482 A 20121017**

Priority  
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• EP 2012070525 W 20121017

Abstract (en)  
[origin: WO2013068209A1] A hand-held power tool has a motor, a tool holder, and a percussion mechanism that is disposed between the motor and the tool holder in the drive train. The percussion mechanism includes a first shaft (12) and a second shaft (13). A magnetically conductive ring gear (15) is connected to the first shaft (12). An inner wall (32) of the ring gear (15) is eccentric in relation to an axis (14) of the second shaft (13). A magnetically conductive impeller (16) is connected to the second shaft and is arranged to rotate within the ring gear (15). The impeller (16) is spaced from the ring gear (15) by a first air gap in a first position while being spaced from the ring gear (15) by a second air gap in a second position, the first air gap being smaller than the second one. The eccentricity of both the inner wall and the impeller require the different positions. A magnet array (23) is arranged coaxially to the second shaft (13). A magnetorheological fluid fills a cavity between the ring gear (15) and the impeller (16).

IPC 8 full level  
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**B25B 21/02** (2013.01 - EP US); **F16D 5/00** (2013.01 - EP US); **F16D 37/02** (2013.01 - EP US); **F16D 2037/002** (2013.01 - EP US)

Citation (search report)  
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